TEXAS DEPARTMENT OF INSURANCE

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PRODUCT EVALUATION Effective July 1, 2011

WIN-392

*The following product has been evaluated for compliance with the wind loads specified in the **International Residential Code (IRC)** and the **International Building Code (IBC)**. This product shall be subject to reevaluation **August 2012**.*

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Series 100 Aluminum Single Hung Windows, Individual, Non-impact Resistant, manufactured by

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will be acceptable in designated catastrophe areas along the Texas Gulf Coast when installed in accordance with the manufacturer's installation instructions and this product evaluation.

PRODUCT DESCRIPTION

The Series 100 aluminum single hung windows evaluated in this report are non-impact resistant windows. This evaluation report includes individual, aluminum single-hung windows based on the following tested configurations:

General Description:

System	Description	Label Rating
1	Series 100 Aluminum Single Hung; (O/X)	H-R40 48 x 72
2	Series 100 Aluminum Single Hung; (O/X)	H-R50 44 x 72

Product Dimensions:

System	Overall Size	Operable Sash Size	Fixed Daylight Opening Size
1	48" x 72"	47 ¼" x 36 ½"	45 ⅜" x 33 ⅝"
2	44" x 72"	43 ¼" x 36 ¼"	41 ⅜" x 33 ½"

Glazing Description:

System	Glass Construction [1]	Glazing Method [2]
1	IG-1	GM-1
2	IG-2	GM-1

Note: [1] See the "Glass Construction Key" for the glazing construction.
[2] See the "Glazing Method Key" for the glazing method description.

Glass Construction Key:

IG-1: The fixed and operable sashes contain a sealed insulating glass unit. The sealed insulating glass units are comprised of two double strength ($\frac{1}{8}$ ") annealed glass lites separated by a desiccant-filled aluminum spacer system. The glass thickness and type used in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

IG-2: The fixed and operable sashes contain a sealed insulating glass unit. The sealed insulating glass units are comprised of two double strength ($\frac{1}{8}$ ") annealed glass lites separated by a Truseal Swiggle aluminum spacer system. The glass thickness and type used in the tested assembly and in smaller assemblies shall comply with ASTM E 1300-04.

Glazing Method Key:

GM-1: The insulating glass units are exterior glazed onto a bed of acrylic backbedding at the interior and along the full perimeter. The insulating glass units are secured in place with vinyl snap-in glazing beads.

Frame Construction: The frame members are manufactured from extruded aluminum. The frame corners are coped, butted, and secured together with two (2) screws per corner. The fixed interlock is secured to the frame side jambs with one (1) screw per end.

Sash Construction: The sash members are manufactured from extruded aluminum. The sash corners are coped, butted, and secured together with one (1) screw per corner. Sash guides are located in the sash stiles.

Reinforcement: None.

Hardware:

- Cam locks; Two (2) required; Located on the sash top rail. Secured to the frame with two (2) screws each.
- Keeper groove; Two (2) required; Located on the fixed interlock rail opposite the cam lock locations.
- Spiral balance; Two (2) required; One located in each frame side jamb.

Product Identification:

System 1: A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code name (**KR-1**); product name: **Series 100**; performance characteristics; the approved inspection agency (AAMA); and the applicable standard: ANSI/AAMA/NWWDA 101/I.S.2-97.

Product Identification (continued):

System 2: A certification program label (AAMA) will be affixed to the window. The certification program label includes the manufacturer's code name (**KR-1**); product name: **Series 100 SH**; performance characteristics; the approved inspection agency (AAMA); and the applicable standard: AAMA/WDMA 101/I.S.2/A440-05.

LIMITATIONS

Design pressures:

System	Maximum Width (in.)	Maximum Height (in.)	Design Pressures (psf)
1	48	72	± 40
2	44	72	± 50

Impact Resistance: These window assemblies do not satisfy the Texas Department of Insurance's criteria for protection from windborne debris. These window assemblies will need to be protected with an impact protective system when installed in areas where windborne debris protection is required.

Acceptance of Smaller Assemblies: Window assemblies with dimensions equal to or smaller than those specified above are acceptable within the limitations specified in this report.

INSTALLATION INSTRUCTIONS

General: The window assembly shall be installed in accordance with the manufacturer's installation instructions and this evaluation report. Detailed installation instructions and drawings are available from the manufacturer.

Installation:

System 1: The wall framing members shall be minimum Spruce-Pine-Fir (SPF) dimension lumber. The window shall be mounted to the wood wall framing members using the nailing fin of the window with minimum No. 8 screws. The fasteners shall be located approximately 2 inches from each corner and approximately 12 inches on center along the perimeter of the window frame. The fasteners shall be long enough to penetrate a minimum of 1 ½" into the wall framing members.

System 2:

New Construction: The wall framing members shall be minimum Spruce-Pine-Fir (SPF) dimension lumber. The window shall be mounted to the wood wall framing members using the nailing fin of the window with minimum No. 8 x 2" screws. The fasteners shall be located approximately 2 inches from each corner and approximately 12 inches on center along the perimeter of the window frame. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing members.

Replacement Construction: The wall framing members shall be minimum Spruce-Pine-Fir (SPF) dimension lumber. The window shall be mounted to the wood wall framing members using the frame of the window with minimum No. 8 screws. Along the head, the fasteners shall be located approximately 5 inches from each corner and one (1) at the mid span. Along each side jamb, the fasteners shall be located approximately 5 inches from each corner and approximately 20 inches on center. The fasteners shall be long enough to penetrate a minimum of 1 ½ inches into the wall framing members.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.